IN THE CLAIMS

1. (currently amended) A method ~~Method~~ of assigning weighting coefficients to measurements of a succession of stars acquired by a star sensor ~~(4)~~ connected to a client device ~~(1)~~ in order to determine a spatial orientation, comprising the steps of giving ~~characterised in that~~ higher or lower preference ~~is given~~ to refreshment of the positions of measurements with the highest weights ~~and / or~~ and/or stars on which these measurements are made by the star sensor ~~(4) and / or~~ and/or its client device ~~(1)~~, so as to displace part of the power of the error associated with the set of star measurements within the frequency spectrum.

2. (currently amended) The method ~~Method~~ according to claim 1, characterised in that in the calculation of the weights of measurements in a current selection, the reinforcement or attenuation takes place as a result of applying a distance weight associated with each measurement in the current selection and characteristic of an average distance between firstly the said measurement and secondly the measurements for the previous selections and the other measurements in the current selection.

3. (currently amended) The method ~~Method~~ according to claim 2, characterised in that the distance weight associated with the current selection measurement is calculated as a weighted average of the corresponding distances between firstly the said measurement, and secondly respectively the measurements for the previous selections and the other measurements in the current selection.

4. (currently amended) The method ~~Method~~ according to claim 3, characterised in that the weighting coefficient

associated with the distance between a first measurement in the current selection and a second measurement in a previous selection or another measurement in the current selection includes a memory coefficient associated with the said second measurement, ~~and / or~~ and/or the weight of the second measurement if it belongs to a previous selection or a temporary weight if it belongs to the current selection.

5. (currently amended) The method ~~Method~~ according to ~~either of claims~~ claim 3 ~~or 4~~, characterised in that the distance weight calculation combines the angular distance between the two measurements, and an identity distance that depends on the difference in nature of the two stars for which the measurements are being made.

6. (currently amended) The method ~~Method~~ according to ~~either of claims~~ claim 4 ~~or 5~~, characterised in that the memory coefficient of a measurement m_i at time t is defined using the following formula:

$$Mem(m_i/t) = \mu \times \Pi^{-[t-T(m_i)]},$$ where

- $T(m_k)$ is a validity date of a measurement m_k
- μ and Π are constants.

7. (currently amended) The method ~~Method~~ according to ~~any one of claims~~ claim 2 ~~to 6~~, characterised in that a charge is assigned to each star for which a measurement is made, the charge summarising the weights assigned to the measurements made on the said star in the past, attenuated by the passage of time.

8. (currently amended) The method ~~Method~~ according to claim 7, characterised in that the charge of the star e_p is defined at an instant T by the following formula:

$$Cha\,(e_p, T) = \sum_{\substack{i=P+1 \\ E(m_i)=e_p}}^{N} [A(m_i) \, x \, \mathrm{Mem}(m_i/T)]$$

where $Mem(m_i/T)$ is the memory coefficient of the measurement m_i at time T, $E(m_i)$ is the star on which the measurement m_i is made, and $A(m_i)$ is the measurement weight m_i.

9. (currently amended) The method ~~Method~~ according to ~~either of claims~~ claim 7 ~~or 8~~, characterised in that the charge associated with a star to which a measurement in the current selection is related, is updated before it is used in the calculation of the weight associated with a measurement, using a coefficient that depends on the difference Δ between the current date and the last update date for this charge.

10. (currently amended) The method ~~Method~~ according to claim 9, characterised in that the coefficient may be a factor and is in the form $\Pi^{-\Delta}$, where Π is a constant.

11. (currently amended) The method ~~Method~~ according to claim 9, characterised in that the coefficient is additive and is in the form $_{-\rho x \Delta}$, where ρ is a constant.

12. (currently amended) The method ~~Method~~ according to ~~any one of claims~~ claim 7 ~~to 11~~, characterised in that after calculating the weight associated with a measurement in the current selection, the charge associated with the star for which this measurement was made is updated.

13. (currently amended) The method ~~Method~~ according to claim 12, characterised in that the update is made by adding the weight associated with the measurement.

14. (currently amended) The method ~~Method~~ according to ~~any one of claims~~ claim 1 ~~to 13~~, characterised in that a random function is used in the calculation of the weights.

15. (currently amended) The method ~~Method~~ according to ~~any one of claims 1 to 14~~claim 2, characterised in that the calculation of the distance weight is iterated with a temporary weight for measurements in the current selection, the distance weight being used to calculate a new weight itself used to calculate a new distance weight and so on, until convergence towards a final weight.

16. (currently amended) The method ~~Method~~ according to ~~any one of claims~~ claim 1 ~~to 15~~, characterised in that ~~the~~ digital values of the method are saved in memory and processing means of the sensor ~~(4) and / or~~ and/or the client device ~~(1)~~.

17. (currently amended) The method ~~Method~~ according to ~~any one of claims~~ claim 1 ~~to 16~~, characterised in that the ~~renewal~~ refreshment rate of stars with a large weight is increased by increasing the frequency of measurements of the star sensor ~~(4) and / or~~ and/or the client device ~~(1)~~.

18. (currently amended) The method ~~Method~~ according to claim 1, characterised in that the dispersion of the complete new selection is used directly in the weights, using processing means related to the sensor ~~(4) and / or~~ and/or client device ~~(1)~~.

19. (currently amended) The method ~~Method~~ according to claim 18, characterised in that processing means related to the sensor ~~(4) and / or~~ and/or the client device ~~(1) comprising~~

comprise a neural network ~~neurone structure are~~ used to directly affect dispersion in the weights.

20. (currently amended) A star ~~Star~~ tracking or acquisition system~~,~~ comprising: a star sensor ~~(4)~~ connected to a client device ~~(1)~~ comprising means of assigning weight coefficients to measurements of a succession of stars acquired by the sensor or its client device in order to determine a spatial orientation, characterised in that it comprises means of giving higher or lower preference to refreshment by the star sensor ~~(4)~~ of the positions of measurements with the highest weights, and means of displacing part of the power of the error associated with the set of star measurements within the frequency spectrum.

21. (currently amended) The system~~System~~ according to claim 21~~,~~ ~~characterised in that it comprises~~ comprising neural network means connected to the sensor ~~(4) and / or~~ and/or the client device ~~(1) comprising a neurone structure~~.